Index

to Authors, key words in titles, and to new taxa and stratigraphical terms in Volume 130; (R) indicates Review

Acadian orogen, 203
Accretionary complex, 737
Acharyya, A., Bhattacharya, S. & Sen, S. K. Structural evidence supporting a remnant origin of patchy charnockites in the Chilka Lake area, India, 363
Acritarchs, 257
Advances in X-Ray Analysis, Volume 34 (R), 140
Aeromagnetic survey, 575, 583
Africa, 177, 335, 755; (R) 121, 284
An Agenda of Science for Environment and Development into the 21st Century (R), 397
Ages of Gaia (R), 546
Ainsworth, R. B. & Smith, R. D. A. Discussion on an iridium anomaly in the Ludlow bone Bed from the Upper Silurian, England: Comment, 855
Alexander Island, 737
Algae (R), 285
Algeria (R), 133
Alsop, G. I. & Holdsworth, R. E. The distribution, geometry and kinematic significance of Caledonian buckle folds in the western Moine Nappe, northwestern Scotland, 353
Alsop, G. I. & Hutton, D. H. W. Major southeast-directed Caledonian thrusting and folding in the Dalradian rocks of mid-Ulster: implications for Caledonian tectonics and mid-crustal shear zones, 233
Amber, 847
Ammonites, 57
An Introduction to Geophysical Exploration, 2nd ed. (R), 124
Andresen, A., Dypvik, H. & Haremo, P. Mesozoic extension versus Tertiary compression along the Billefjorden Fault Zone south of Isfjorden, central Spitsbergen, 783
Anglesey, 85
Anglo-Brabant Massif, 561, 563, 569, 575, 583, 593, 605, 613, 621, 631, 639, 647, 657, 665, 673, 681, 691, 711, 725, 835
Antarctica, 1, 513, 737; (R) 556
Apatite, 639
Applied Mineralogical Thermodynamics. Selected Topics (R), 126
Archaean, 755
Ashgill, 673
Atacama, 417
Atlantic Ocean (R), 121, 731
Atlas of Palaeogeography and Lithofacies (R), 409
Aucellina, 533
Avalonia, 621, 691
Azzaro, E., Bellanca, A. & Neri, R. Mineralogy and geochemistry of Mesozoic black shales and interbedded carbonates, southeastern Sicily: evaluation of diagenetic processes, 191

Barbin, V., Ramseyer, K., Debenay, J. P., Schein, E., Roux, M. & Decrouez, D. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Reply, 269
Barite, 289
Barrenechea, J. F., Rodas, M. & Luque, F. J. Graphite geothermometry in low and high temperature regimes: two case studies, 501
Basin, forearc, 737; intra-arc, 417
Belgium, 563, 569, 575, 583, 605, 639, 673, 699
Bell, A. M. & Kneller, B. C. An Acadian mountain front in the English Lake District: the Westmorland Monocline, 203
Bell, A. M., Kneller, B. C. & King, L. M. Foreland basin development and tectonics on the northwest margin of eastern Avalonia, 691
Bell, C. M. & Suarez, M. The depositional environments and tectonic development of a Mesozoic intra-arc basin, Atacama Region, Chile, 417
Bellanca, A., Neri, R. & Azzaro, E. Mineralogy and geochemistry of Mesozoic black shales and interbedded carbonates, southeastern Sicily: evaluation of diagenetic processes, 191
Bennett, M. R. & Boulton, G. S. A reinterpretation of Scottish 'hummocky moraine' and its significance for the deglaciation of the Scottish Highlands during the Younger Dryas or Loch Lomond Stadial, 301
Bentonites, 93
Berhe, S. M. & Drury, S. A. Accretion tectonics in northern Eritrea revealed by remotely sensed imagery, 177
Bevins, R. E. & Cope, J. C. W. The stratigraphy and setting of the Precambrian rocks of the Llangynog Inlier, Dyfed, South Wales, 101
Bhattacharya, S., Sen, S. K. & Acharyya, A. Structural evidence supporting a remnant origin of patchy charnockites in the Chilka Lake area, India, 363
Billefjorden Fault Zone, 783
Biogeochemistry (R), 137, 408
Biogeochemistry. An Analysis of Global Change (R), 137
The Biology and Evolution of Fossil Plants (R), 547
Biomechanics in Evolution (R), 398
Biostratigraphy, 29, 483, 533, 681, 767, 817
The BIRPS Atlas. Deep Seismic Reflection Profiles Around the British Isles (R), 391
Bivalve, 533
Blackmore, R., Keeley, M. L., Lewis, C. L. E., Sevastopulo, G. D. & Clayton, G. Apatite fission track data from southeast Ireland: implications for post-Variscan burial history, 171
Blundell, D. J. Deep structure of the Anglo-Brabant Massif revealed by seismic profiling, 563
Boreham, S. & West, R. G. Late Quaternary sediments with *Chara* encrustations in southern Fenland, 543
Boulton, G. S. & Bennett, M. R. A reinterpretation of Scottish 'hummocky moraine' and its significance for the deglaciation of the Scottish Highlands during the Younger Dryas or Loch Lomond Stadial, 301
Brachiopod, 265
Brazil (R), 395
Break-up, continental (R), 732
Brewer, T. S., Webb, P. C. & Pharaoh, T. C. Subduction-related magmatism of late Ordovician age in eastern England, 647
Brown, M. & D'Lemos, R. S. Sm–Nd isotope characteristics of late Cadomian granite magmatism in northern France and the Channel Islands, 797
Buchia, 533
Busby, J. P., Kimbell, G. S. & Pharaoh, T. C. Integrated geophysical/geological modelling of the Caledonian and Precambrian basement of southern Britain, 593

Buttler, C., Mamet, B., Mouravieff, N., Poty, E., Préat, A., Tourneur, F. & Vanguestaine, M. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673

Cadomian, 797
Cai Chong-Yang, Dou Ya-Wei & Edwards, D. New observations on a Pridoli plant assemblage from north Xinjiang, northwest China, with comments on its evolutionary and palaeogeographical significance, 155
Calcareous Algae and Stromatolites (R), 285
Caledonian Structures in Britain – South of the Midland Valley (R), 401
Caledonian, 233, 471, 593, 647; (R) 401
Caledonides, 471, 561, 613, 725
Cambrian, 29, 245, 257, 443, 665, 817; (R) 276
Cambrian–Ordovician Boundary, 443
Carbon isotopes, 443
Carbonate platform, 805
Carbonates, 69, 191, 269, 673
Case, D. J. Evidence for temperate soil development during the early Devensian in Gower, South Wales, 113
Catastrophe (R), 857
Cathodoluminescence, 269
Celestite, 289
Chacksfield, B. C., De Vos, W., D'Hooge, L., Dusar, M., Lee, M. K., Poitevin, C., Royles, C. P. & Verniers, J. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Chacksfield, B. C., Key, R. M. & Phillips, E. R. Emplacement and thermal metamorphism associated with the post-orogenic Strath Ossian Pluton, Grampian Highlands, Scotland, 379
Channel Islands, 797
Chaos (R), 555
Chara, 543
Charnockite, 363
Chert, 805
Chile, 319, 417
Chilka Lake, 363
China, 155, 443, 533
Chronostratigraphy, 47, 817
Classic Petroleum Provinces (R), 129
Clay mineralogy (R), 553
Clayton, G., Blackmore, R., Keeley, M. L., Lewis, C. L. E. & Sevastopulo, G. D. Apatite fission track data from southeast Ireland: implications for post-Variscan burial history, 171
Climate Change 1992. The Supplementary Report to the IPCC Scientific Assessment (R), 396
Climate change (R), 123, 137, 283, 396, 404
Cobban, W. A. & Kennedy, W. J. Maastrichtian ammonites from the Corsicana Formation in northeast Texas, 57
Collins Photo Guide to Fossils (R), 400
The Colours of Opaque Minerals (R), 139
Compression, tectonic, 783
Conodonts, 215; (R) 276
Constructional Morphology and Evolution (R), 280
Continental Drift (R), 546
Continental facies (R), 732
Cooper, A. H. & Hughes, R. A. Discussion on evidence for an unconformity at the base of the Eycott Volcanic Group: Comment, 271
Cooper, A. H., Millward, D., Johnson, E. W. & Soper, N. J. The early Palaeozoic evolution of northwest England, 711
Cooper, A. H., Stone, P. & Hughes, R. A. Structural evolution of the Skiddaw Group (English Lake District) on the northern margin of eastern Avalonia, 621
Cope, J. C. W. & Bevins, R. E. The stratigraphy and setting of the Precambrian rocks of the Llangynog Inlier, Dyfed, South Wales, 101
Corsicana Formation, 57
Cox, S. C. Inter-related plutonism and deformation in South Victoria Land, Antarctica, 1
Cretaceous Echinoids from North-eastern Brazil (R), 395
Cretaceous, 15, 57, 533, 767, 805, 847; (R) 283, 395
Crimes, T. P. & Uchman, A. A concentration of exceptionally well-preserved large tubular foraminifera in the Eocene Zumaya flysch, northern Spain, 851
Cross Fell, 369
Crust, continental (R), 286
Crystalline solids (R), 410
Crystallization, 289
Culmination, 471
Cycles, geochemical (R), 137

Dalradian, 233
Daly, P., Merriman, R. J., Pharaoh, T. C. & Woodcock, N. H. The metamorphic history of the concealed Caledonides of eastern England and their foreland, 613; erratum, 865
De Vos, W., D'Hooge, L., Dusar, M., Lee, M. K., Poitevin, C., Royles, C. P., Verniers, J. & Chacksfield, B. C. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
De Vos, W., Lee, M. K., Pharaoh, T. C., Williamson, J. P. & Green, C. A. Evidence on the deep structure of the Anglo-Brabant Massif from gravity and magnetic data, 575
De Vos, W., Verniers, J., Herbosch, A. & Vanguestaine, M. A new geological map of the Brabant Massif, Belgium, 605
Debenay, J. P., Schein, E., Roux, M. Decrouez, D., Barbin, V. & Ramseyer, K. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Reply, 269
Decrouez, D., Barbin, V., Ramseyer, K., Debenay, J. P., Schein, E. & Roux, M. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogentic fingerprint: Reply, 269
Deep Interior of the Earth (R), 285
Deep structure, 563, 569, 575, 665; (R) 285
Deformation, 1, 203, 233, 353, 471, 783; (R) 410, 859
Development (R), 397
Devensian, 113
Devonian, 69
D'Hooge, L., Dusar, M., Lee, M. K., Poitevin, C., Royles, C. P., Verniers, J., Chacksfield, B. C. & De Vos, W. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Diagenesis, 191
Differentiation, sidewall, 453
Dinosaurs, 767; (R) 282
D'Lemos, R. S. & Brown, M. Sm–Nd isotope characteristics of late Cadomian granite magmatism in northern France and the Channel Islands, 797
Dou Ya-Wei, Edwards, D. & Cai Chong-Yang. New observations on a Pridoli plant assemblage from north Xinjiang, northwest China, with comments on its evolutionary and palaeogeographical significance, 155
Doubleday, P. A., Macdonald, D. I. M. & Nell, P. A. R.

Sedimentology and structure of the trench-slope to forearc basin transition in the Mesozoic of Alexander Island, Antarctica, 737
Downie, C., Wright, A. E., Fairchild, I. J. & Moseley, F. The Lower Cambrian Wrekin Quartzite and the age of its unconformity on the Ercall Granophyre, 257
Drury, S. A. & Berhe, S. M. Accretion tectonics in northern Eritrea revealed by remotely sensed imagery, 177
Duin, E., Dusar, M., Langenaeker, V. & Rijkers, R. Crustal structure of the London–Brabant Massif, southern north Sea, 569
Dusar, M., Langenaeker, V., Rijkers, R. & Duin, E. Crustal structure of the London–Brabant Massif, southern North Sea, 569
Dusar, M., Lee, M. K., Poitevin, C., Royles, C. P., Verniers, J., Chacksfield, B. C., De Vos, W. & D'Hooge, L. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling tecniques, 583
Dykes, 117
The Dynamic Earth. An Introduction to Physical Geology, 2nd ed. (R), 394
Dynamic Processes of Material Transport and Transformation in the Earth's Interior (R), 404
Dynamics, Earth (R), 394, 404, 546; glacier (R), 279
Dypvik, H., Haremo, P. & Andresen, A. Mesozoic extension versus Tertiary compression along the Billefjorden Fault Zone south of Isfjorden, central Spitsbergen, 783

Earth history (R), 128, 391, 546, 857
Earth Observation Remote Sensing. Survey of Missions and Sensors (R), 861
East Anglia, 681
Economic geology (R), 409, 410, 556
Edwards, D., Cai Chong-Yang & Dou Ya-Wei. New observations on a Pridoli plant assemblage from north Xinjiang, northwest China, with comments on its evolutionary and palaeogeographical significance, 155
Electron Probe Quantitation (R), 140
Elorza, J. & Garcia-Garmilla, F. Chert appearance in the Cueva–Bedón carbonate platform (upper Cretaceous, northern Spain), 805
Energy and Mineral Resource Systems: An Introduction (R), 411
Environment (R), 397, 403, 404, 857, 858
Eocene, 483, 851
Epithermal Gold in the Philippines: Island Arc Metallogenesis, Geothermal Systems and Geology (R), 128
Equidae (R), 857
Equilibria, 501
Ercall Granophyre, 257
Eritrea, 177
Estonia, 265
Europe (R), 403, 732
Evolution (R), 280, 398, 547, 557, 857
Evolution of Palaeoecology and Palaeoenvironment of Permian and Triassic Fluvial Basins in Europe. Volume 1: Western and Eastern Europe; *Volume 2: Southeastern Europe and Index* (R), 732
Evolutionary Paleobiology of Behavior and Coevolution (R), 134
Exploration Britain. Geological Insights for the Next Decade (R), 860
Exploration geology (R), 409
Exploration, geophysical (R), 124, 285
Exposed Cross-Sections of the Continental Crust (R), 286
Extension, tectonic, 783
Extinction and Phylogeny (R), 545
Extinction. Bad Genes or Bad Luck? (R), 277
Extinction, 483; (R) 277, 545
Eycott Volcanic Group, 271

Facies architecture (R), 403
Facies Models. Response to Sea Level Change (R), 405
Fairchild, I. J., Moseley, F., Downie, C. & Wright, A. E. The Lower Cambrian Wrekin Quartzite and the age of its unconformity on the Ercall Granophyre, 257
Fenland, 543
Fernandez-Diaz, L., Prieto, M. & Putnis, A. Crystallization of solid solutions from aqueous solutions in a porous medium: zoning in $(Ba,Sr)SO_4$, 289
Fiducial stations (R), 860
Finch, A. A., Reavy, R. J. & Hutton, D. H. W. The nodular granite of Castanheira, north central Portugal: origin of the nodules and evidence for diapiric mobilization of granite, 145
Finite Plastic Deformation of Crystalline Solids (R), 410
Fission track analysis, 639; data; 171
Flow direction, 117
Floyd, P. A., Holdsworth, R. E. & Steele, S. A. Geochemistry of the Start Complex greenschists: Rhenohercynian MORB?, 345
Fluid–mineral interface (R), 411
Flysch, 851
Foraminfera, 483, 851
Forearc, 737
Fortey, N. J., Roberts, B. & Hirons, S. R. Relationship between metamorphism and structure in the Skiddaw Group, English Lake District, 631
Fossil Horses. Systematics, Paleobiology, and Evolution of the Family Equidae (R), 857
Fossils, in the Field. Information Potential and Analysis (R), 554
Fractals and Chaos in Geology and Geophysics (R), 555
France, 797
Friedman, G. M. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Comment, 269
From Shoreline to Abyss: Contributions in Marine Geology in Honor of Francis Parker Shepard (R), 407
Fürsich, F. T. & Sha, J. Biostratigraphy of the Upper Jurassic–Lower Cretaceous bivalves *Buchia* and *Aucellina* of eastern Heilongjiang, northeast China, 533

Gabbro, 431
Gaia (R), 546, 858
Garcia-Garmilla, F. & Elorza, J. Chert appearance in the Cueva–Bedón carbonate platform (upper Cretaceous, northern Spain), 805
Gaskarth, J. W., Henney, P. J. & Thorpe, R. S. Composite Ordovician lamprophyre (spessartite) intrusions around the Midlands Microcraton in central Britain, 657
Gayer, R. A., Stephens, M. B. & Greiling, R. O. A basement culmination in the Scandinavian Caledonides formed by antiformal stacking (Bångonåive, northern Sweden), 471
Gemology, 2nd ed. (R), 279
Geochemistry, 85, 93, 191, 345, 797, 835; (R) 135, 408, 411, 859; organic (R), 861; sedimentary, 191
Geohazards. Natural and Man-Made (R), 557
Geology and Environment in Western Europe. A Coordinated Statement by the Western European Geological Surveys (R), 403
Geology and Hydrocarbon Habitat of the West Siberian Basin (R), 858

Geology and Scenery in Britain (R), 558
The Geology of Antarctica (R), 556
Geology of England and Wales (R), 281
Geology of Japan (R), 552
Geology, economic (R), 409, 410, 556
Geology, marine (R), 407, 410
Geology, petroleum (R), 129, 139, 403, 858, 860, 862
Geology, physical (R), 394, 549
Geology, structural (R), 125, 394, 400, 401
Geophysical Theory (R), 396
Geophysics (R), 285, 286, 396, 555; exploration (R), 124; modelling (R), 593
Geothermometry, 501
Germany, 725
Giese, U., Walter, R., Von Winterfeld, C. & Katzung, G. The Rügen Caledonides, northeast Germany, 725
Glacial Deposits in Great Britain and Ireland (R), 278
Glacial deposits, 301; (R) 278, 394, 547
Glaciology (R), 278, 279
Global Biogeochemical Cycles (R), 408
Global Climate and Ecosytem Change (R), 123
The Global Paleomagnetic Database. Design, Installation and Use with ORACLE (R), 281
Global Perspectives on Ordovician Geology (R), 550
Global positioning system (R), 860
Gold (R), 128, 410
Gold. The Indian Scene (R), 410
Gonzalvo, G., Keller, G. & Molina, E. The Eocene–Oligocene planktic foraminiferal transition: extinctions, impacts and hiatuses, 483
Gower, 113
Granite, 145, 797; (R), 406
Granitoid Rocks (R), 406
Granitoids, 15; (R) 406
Grantham, G. H. & Harris, C. Geology and petrogenesis of the Straumsvola nepheline syenite complex, Dronning Maud Land, Antarctica, 513
Graphite, 501
Gravity data, 575, 583
Green, C. A., De Vos, W., Lee, M. K., Pharaoh, T. C. & Williamson, J. P. Evidence on the deep structure of the Anglo-Brabant Massif from gravity and magnetic data, 575
Greenland, 431
Greenschist, 345
Greiling, R. O., Gayer, R. A. & Stephens, M. B. A basement culmination in the Scandinavian Caledonides formed by antiformal stacking (Bångonåive, northern Sweden), 471

Haremo, P., Andresen, A. & Dypvik, H. Mesozoic extension versus Tertiary compression along the Billefjorden Fault Zone south of Isfjorden, central Spitsbergen, 783
Harris, C. & Grantham, G. H. Geology and petrogenesis of the Straumsvola nepheline syenite complex, Dronning Maud Land, Antarctica, 513
Hazard analysis (R), 557
Heavy Minerals in Colour (R), 139
Henney, P. J., Thorpe, R. S. & Gaskarth, J. W. Composite Ordovician lamprophyre (spessartite) intrusions around the Midlands Microcraton in central Britain, 657
Henwood, A. A., Simpson, M. & Nicholas, C. J. A new discovery of early Cretaceous (Wealden) amber from the Isle of Wight, 847
Herbosch, A., Servais, T. & Vanguestaine, M. Review of the stratigraphy of the Ordovician in the Brabant Massif, Belgium, 699
Herbosch, A., Vanguestaine, M., De Vos, W. & Verniers, J. A new geological map of the Brabant Massif, Belgium, 605
Hey's Mineral Index. Mineral Species, Varieties and Synonyms, 3rd ed. (R), 551
Hiatuses, 443, 483
Hiller, N. A modern analogue for the Lower Ordovician *Obolus* conglomerate of Estonia, 265
Hirons, S. R., Fortey, N. J. & Roberts, B. Relationship between metamorphism and structure in the Skiddaw Group, English Lake District, 631
Holdsworth, R. E. & Alsop, G. I. The distribution, geometry and kinematic significance of Caledonian buckle folds in the western Moine Nappe, northwestern Scotland, 353
Holdsworth, R. E., Steele, S. A. & Floyd, P. A. Geochemistry of the Start Complex greenschists: Rhenohercynian MORB? 345
Holmes' Principles of Physical Geology, 4th ed. (R), 549
Hominids (R), 395
Horses (R), 857
Huff, W. D., Merriman, R. J., Morgan, D. J. & Roberts, B. Distribution and tectonic setting of Ordovician K-bentonites in the United Kingdom, 93
Hughes, R. A. & Cooper, A. H. Discussion on evidence for an unconformity at the base of the Eycott Volcanic Group: Comment, 271
Hughes, R. A., Cooper, A. H. & Stone, P. Structural evolution of the Skiddaw Group (English Lake District) on the northern margin of eastern Avalonia, 621
Hughes, R. A. & Kokelaar, P. The timing of Ordovician magmatism in the English Lake District and Cross Fell inliers, 369
Hutton, D. H. W. & Alsop, G. I. Major southeast-directed Caledonian thrusting and folding in the Dalradian rocks of mid-Ulster: implications for Caledonian tectonics and mid-crustal shear zones, 233
Hutton, D. H. W., Finch, A. A. & Reavy, R. J. The nodular granite of Castanheira, north central Portugal: origin of the nodules and evidence for diapiric mobilization of granite, 145
Hydrocarbons (R), 858, 861; exploration for (R), 860
Hydrothermal Mineral Deposits. Principles and Fundamental Concepts for the Exploration Geologist (R), 409
Hylaeosaurus, 767

Iapetus Ocean (R), 731
Iberia, 817; (R) 397
Ice Age Earth. Late Quaternary Geology and Climate (R), 394
Ice Composition and Glacier Dynamics (R), 279
Ichnology (R), 282
Igneous and Metamorphic Rocks Under the Microscope. Classification, Textures, Microstructures and Mineral Preferred Orientations (R), 555
Igneous rocks, 335, 431, 513, 657, 835; (R) 555; *see* Magmatism; Plutonic rocks; Volcanic rocks
Image-based display techniques, 583
Impact event, 483, 855
India, 363
Integrated modelling techniques, 583
Interior, Earth's (R), 404
International Global Network of Fiducial Stations. Scientific and Implementation Issues (R), 860
Intra-arc basin, 417
Introduction to Clay Minerals. Chemistry, Origins, Uses and Environmental Significance (R), 553

An Introduction to Geophysical Exploration, 2nd ed. (R), 124
Introduction to Mineral Sciences (R), 275
Introduzione alla Geologia Strutturale (R), 125
Intrusion, 657
Inverse Modeling in Exploration Geophysics (R), 285
Ireland, 171, 233; (R) 278
Iridium, 855
Isle of Wight, 847
Isotope geochemistry, 797, 835
Italy, 453

Japan, 15, 117; (R) 552
Jeletzkytes sp. nov., 57
Johnson, E. W., Soper, N. J., Cooper, A. H. & Millward, D. The early Palaeozoic evolution of northwest England, 711
Jurassic and Cretaceous Floras and Climates of the Earth (R), 283
Jurassic, 191, 533; (R) 283

Kap Edvard Holm Complex, 431
Karlova, G. A. & Khomentovsky, V. V. Biostratigraphy of the Vendian–Cambrian beds and the lower Cambrian boundary in Siberia, 29
Katzung, G., Giese, U., Walter, R. & Von Winterfeld, C. The Rügen Caledonides, northeast Germany, 725
Keeley, M. L., Lewis, C. L. E., Sevastopulo, G. D., Clayton, G. & Blackmore, R. Apatite fission track data from southeast Ireland: implications for post-Variscan burial history, 171
Keller, G., Molina, E. & Gonzalvo, G. The Eocene–Oligocene planktic foraminiferal transition: extinctions, impacts and hiatuses, 483
Kennedy, W. J. & Cobban, W. A. Maastrichtian ammonites from the Corsicana Formation in northeast Texas, 57
Key, R. M., Phillips, E. R. & Chacksfield, B. C. Emplacement and thermal metamorphism associated with the post-orogenic Strath Ossian Pluton, Grampian Highlands, Scotland, 379
Khomentovsky, V. V. & Karlova, G. A. Biostratigraphy of the Vendian–Cambrian beds and the lower Cambrian boundary in Siberia, 29
Kimbell, G. S., Pharaoh, T. C. & Busby, J. P. Integrated geophysical/geological modelling of the Caledonian and Precambrian basement of southern Britain, 593
Kinetics, 289
King, L. M., Bell, A. M. & Kneller, B. C. Foreland basin development and tectonics on the northwest margin of eastern Avalonia, 691
Kirschvink, J. L., Ripperdan, R. L. & Magaritz, M. Carbon isotope and magnetic polarity evidence for non-depositional events within the Cambrian–Ordovician Boundary section near Dayangcha, Jilin Province, China, 443
Kneller, B. C. & Bell, A. M. An Acadian mountain front in the English Lake District: the Westmorland Monocline, 203
Kneller, B. C., King, L. M. & Bell, A. M. Foreland basin development and tectonics on the northwest margin of eastern Avalonia, 691
Kokelaar, P. & Hughes, R. A. The timing of Ordovician magmatism in the English Lake District and Cross Fell inliers, 369
Koobi Fora Research Project Volume 4. Hominid Cranial Remains (R), 395
Kutsukake, T. An initial continental margin plutonism – Cretaceous Older Ryoke granitoids, southwest Japan, 15

Lake District, 203, 271, 369, 621, 631, 691, 711; (R) 402
Lakeland Rocks and Landscape. A Field Guide (R), 402
Lamprophyre, 657
Langenaeker, V., Rijkers, R., Duin, E. & Dusar, M. Crustal structure of the London–Brabant Massif, southern North Sea, 569
Larvae and Evolution. Toward a New Zoology (R), 557
Latera caldera, 453
Laurentia, 691
Le Roex, A. P., Watkins, R. T. & Milner, S. C. Rb–Sr age determinations of rocks from the Okenyenya igneous complex, northwestern Namibia, 335
Lee, M. K., Pharaoh, T. C., Williamson, J. P., Green, C. A. & De Vos, W. Evidence on the deep structure of the Anglo-Brabant Massif from gravity and magnetic data, 575
Lee, M. K., Poitevin, C., Royles, C. P., Verniers, J., Chacksfield, B. C., De Vos, W., D'Hooge, L. & Dusar, M. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Lee, M. K., Verniers, J., Pharaoh, T. C., Molyneux, S. G. & Merriman, R. J. The Caledonides of the Anglo-Brabant Massif reviewed, 561
Lewis, C. L. E., Sevastopulo, G. D., Clayton, G., Blackmore, R. & Keeley, M. L. Apatite fission track data from southeast Ireland: implications for post-Variscan burial history, 171
Life as a Geological Force. Dynamics of the Earth (R), 546
Limpopo Belt, 755
Liñán, E., Perejón, A. & Sdzuy, K. The Lower–Middle Cambrian stages and stratotypes from the Iberian Peninsula: a revision, 817
Lithostratigraphy, 817
Living Earth. A Short History of Life and its Home (R), 128
Löfgren, A. Conodonts from the lower Ordovician at Hunneberg, south-central Sweden, 215
Ludlow Bone Bed, 855
Luque, F. J., Barrenechea, J. F. & Rodas, M. Graphite geothermometry in low and high temperature regimes: two case studies, 501

Maastrichtian, 57
Macdonald, D. I. M., Nell, P. A. R. & Doubleday, P. A. Sedimentology and structure of the trench-slope to forearc basin transition in the Mesozoic of Alexander Island, Antarctica, 737
Magaritz, M., Kirschvink, J. L. & Ripperdan, R. L. Carbon isotope and magnetic polarity evidence for non-depositional events within the Cambrian–Ordovician Boundary section near Dayangcha, Jilin Province, China, 443
Magma chamber processes, 453
Magmas (R), 406
Magmatism and the Causes of Continental Break-up (R), 732
Magmatism in Extensional Structural Settings (R), 125
Magmatism, 369, 647, 797; (R) 125, 732; *see* Igneous rocks; Plutonic rocks, Volcanic rocks
Magnetic data, 575, 583
Magnetic polarity reversals, 443
Mamet, B., Mouravieff, N., Poty, E., Préat, A., Tourneur, F., Vangeustaine, M. & Buttler, C. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Marine Clastic Reservoirs. Examples and Analogues (R), 862
Marine geology (R), 407, 410

Marine Minerals in Exclusive Economic Zones (R), 410
McKie, T. Relative sea-level changes and the development of a Cambrian transgression, 245
Mechanics, quantum (R), 859; thrust (R), 859
Merriman, R. J., Lee, M. K., Verniers, J., Pharaoh, T. C. & Molyneux, S. G. The Caledonides of the Anglo-Brabant Massif reviewed, 561
Merriman, R. J., Morgan, D. J., Roberts, B. & Huff, W. D. Distribution and tectonic setting of Ordovician K-bentonites in the United Kingdom, 93
Merriman, R. J., Pharaoh, T. C., Woodcock, N. H. & Daly, P. The metamorphic history of the concealed Caledonides of eastern England and their foreland, 613; erratum, 865
Metamorphic rocks, 613, 631; (R) 555
Metamorphism, 379, 501
Metazoa (R), 557
Microscopy (R), 555
Mid-Cretaceous Ostracoda of Northeastern Algeria (R), 133
Millward, D., Johnson, E. W., Soper, N. J. & Cooper, A. H. The early Palaeozoic evolution of northwest England, 711
Millward, D. & Molyneux, S. G. Discussion on evidence for an unconformity at the base of the Eycott Volcanic Group: Reply, 272
Milner, S. C., Le Roex, A. P. & Watkins, R. T. Rb–Sr age determinations of rocks from the Okenyenya igneous complex, northwestern Namibia, 335
Mineral Deposit Evaluation. A Practical Approach (R), 556
Mineral deposits (R), 409, 410, 411, 556; resources (R), 135; sciences (R), 275
Mineral–Water Interface Geochemistry (R), 411
Mineralogy (R), 126, 127, 139, 275, 279, 551, 731; clay (R), 553; optical (R), 549; sedimentary, 191
Miocene and Oligocene Petroleum Reservoirs of the Santa Maria and Santa Barbara–Ventura Basins, California (R), 129
Miyake, Y., Yamauchi, S. & Smith, J. V. Flow direction and groundmass shear zones in dykes, Shimane Peninsula, Japan, 117
Modelling, 583, 593
Modern Methods of Igneous Petrology: Understanding Magmatic Processes (R), 132
Moine Nappe, 353
Molina, E., Gonzalvo, G. & Keller, G. The Eocene–Oligocene planktic foraminiferal transition: extinctions, impacts and hiatuses, 483
Molyneux, S. G., Merriman, R. J., Lee, M. K., Verniers, J. & Pharaoh, T. C. The Caledonides of the Anglo-Brabant Massif reviewed, 561
Molyneux, S. G. & Millward, D. Discussion on evidence for an unconformity at the base of the Eycott Volcanic Group: Reply, 272
Mona Complex, 85
Morgan, D. J., Roberts, B., Huff, W. D. & Merriman, R. J. Distribution and tectonic setting of Ordovician K-bentonites in the United Kingdom, 93
Morocco, 69
Morphology, functional (R), 280
Moseley, F., Downie, C., Wright, A. E. & Fairchild, I. J. The Lower Cambrian Wrekin Quartzite and the age of its unconformity on the Ercall Granophyre, 257
Mounds, carbonate mud, 69
Mountains of Fire. The Nature of Volcanoes (R), 133
Mouravieff, N., Poty, E., Préat, A., Tourneur, F., Vangeustaine, M., Buttler, C. & Mamet, B. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Mud mounds, 69

Namibia, 335
The Nature of the Stratigraphical Record, 3rd ed. (R), 857
Nell, P. A. R., Doubleday, P. A. & Macdonald, D. I. M. Sedimentology and structure of the trench-slope to forearc basin transition in the Mesozoic of Alexander Island, Antarctica, 737
Neri, R., Azzaro, E. & Bellanca, A. Mineralogy and geochemistry of Mesozoic black shales and interbedded carbonates, southeastern Sicily: evaluation of diagenetic processes, 191
New Views on an Old Planet. Continental Drift and the History of the Earth (R), 546
Nicholas, C. J., Henwood, A. A. & Simpson, M. A new discovery of early Cretaceous (Wealden) amber from the Isle of Wight, 847
Nitrate, 319
Noble, S. R., Tucker, R. D. & Pharaoh, T. C. Lower Palaeozoic and Precambrian igneous rocks from eastern England, and their bearing on late Ordovician closure of the Tornquist Sea: constraints from U–Pb and Nd isotopes, 835
Nodules, granite, 145
Non-depositional events, 443, 483
North Sea, 563, 569; (R), 391, 392
Nostoceras (*Nostoceras*) *major* sp. nov., 57
Numerical Adventures with Geochemical Cycles (R), 137

Obolus conglomerate, 265
Oceanic Upwelling (R), 551
Okenyenya igneous complex, 335
Oligocene, 483
Optical Mineralogy. Principles & Practice (R), 549
Ordovician (*Caradoc*) *Marginal Basin Volcanism in Snowdonia* (*North-West Wales*) (R), 137
Ordovician, 93, 215, 265, 369, 443, 647, 657, 665, 673, 699, 835; (R), 137, 550
Organic Matter. Productivity, Accumulation, and Preservation in Recent and Ancient Sediments (R), 861
Orogen (R), 121; Acadian, 203
Ostracods (R), 133
Oxide minerals (R), 127, 139
Oxide Minerals: Petrologic and Magnetic Significance (R), 127

Palaeobiology (R), 134, 391, 399, 547
Palaeobiology. A Synthesis (R), 399
Palaeoclimatology (R), 283
Palaeoecology (R), 732
Palaeoenvironment (R), 732
Palaeogeography, 711; (R), 409
Palaeomagnetism (R), 281, 731
Palaeontology (R), 400, 554
Palaeozoic (R), 397; Lower, 1, 85, 711
Paleoclimatology (R), 283
Paleomagnetism of the Atlantic, Tethys and Iapetus Oceans (R), 731
Particle Size Analysis (R), 400
Pereda-Suberbiola, J. *Hylaeosaurus*, *Polacanthus*, and the systematics and stratigraphy of Wealden armoured dinosaurs, 767
Perejón, A., Sdzuy, K. & Liñán, E. The Lower–Middle

Cambrian stages and stratotypes from the Iberian Peninsula: a revision, 817
Periglacial Geomorphology (R), 547
Petrogenesis, 513
Petrography, 319
Petroleum generation (R), 861; geology (R), 129, 139, 403, 858, 860, 861, 862; reservoirs (R), 862
Petrology of Lamproites (R), 135
Petrology, igneous (R), 121, 132, 135; metamorphic (R), 121, 131; sedimentary (R), 136, 398
Phanerozoic Sea-Level Changes (R), 548
Pharaoh, T. C., Brewer, T. S. & Webb, P. C. Subduction-related magmatism of late Ordovician age in eastern England, 647
Pharaoh, T. C., Busby, J. P. & Kimbell, G. S. Integrated geophysical/geological modelling of the Caledonian and Precambrian basement of southern Britain, 593
Pharaoh, T. C., Molyneux, S. G., Merriman, R. J., Lee, M. K. & Verniers, J. The Caledonides of the Anglo-Brabant Massif reviewed, 561
Pharaoh, T. C., Noble, S. R. & Tucker, R. D. Lower Palaeozoic and Precambrian igneous rocks from eastern England, and their bearing on late Ordovician closure of the Tornquist Sea: constraints from U–Pb and Nd isotopes, 835
Pharaoh, T. C., Williamson, J. P., Green, C. A., De Vos, W. & Lee, M. K. Evidence on the deep structure of the Anglo-Brabant Massif from gravity and magnetic data, 575
Pharaoh, T. C., Woodcock, N. H., Daly, P. & Merriman, R. J. The metamorphic history of the concealed Caledonides of eastern England and their foreland, 613; erratum 865
Pharaoh, T. C. & Woodcock, N. H. Silurian facies beneath East Anglia, 681
Philippines (R), 128
Phillips, E. R., Chacksfield, B. C. & Key, R. M. Emplacement and thermal metamorphism associated with the post-orogenic Strath Ossian Pluton, Grampian Highlands, Scotland, 379
Phosphorite, 265
Phylogeny (R), 545
Physical Chemistry of Magmas (R), 406
Physical geology (R), 394, 549
Plants, 155; (R), 283, 547
Plutonic rocks, 1, 15, 335, 379; *see* Igneous rocks; Magmatism
Plutonism, 1, 15
Poitevin, C., Royles, C. P., Verniers, J., Chacksfield, B. C., De Vos, W., D'Hooge, L., Dusar, M. & Lee, M. K. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Polacanthus, 767
Portugal, 145, 817
Poty, E., Préat, A., Tourneur, F., Vanguestaine, M., Buttler, C., Mamet, B. & Mouravieff, N. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Pre-Mesozoic Geology of Iberia (R), 397
Préat, A., Tourneur, F., Vanguestaine, M., Buttler, C., Mamet, B., Mouravieff, N. & Poty, E. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Precambrian, 85, 101, 593
Preliminary Report on the Mineral Resources of Shetland and Results of a Pilot Geochemical Survey (R), 135
The Preparation of Thin Sections of Rocks, Minerals, and Ceramics (R), 404
Pridoli, 155
Prieto, M., Putnis, A. & Fernandez-Diaz, L. Crystallization of solid solutions from aqueous solutions in a porous medium: zoning in $(Ba,Sr)SO_4$, 289
Principles of Igneous and Metamorphic Petrology (R), 121
Principles, Methods, and Applications of Particle Size Analysis (R), 400
Progress in Metamorphic and Magmatic Petrology. A Memorial Volume in Honour of D. S. Korzhinskiy (R), 131
The Proterozoic Biosphere. A Multidisciplinary Study (R), 391
Proterozoic (R), 391, 397
Putnis, A., Fernandez-Diaz, L. & Prieto, M. Crystallization of solid solutions from aqueous solutions in a porous medium: zoning in $(Ba,Sr)SO_4$, 289

Quantum mechanics (R), 859
Quaternary Sediments (R), 126
Quaternary, 301, 543; (R) 126, 278, 394, 547

Ramseyer, K., Debenay, J. P., Schein, E., Roux, M., Decrouez, D. & Barbin, V. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Reply, 269
Rankin, S. & Searl, A. A preliminary petrographic study of the Chilean nitrates, 319
Rb–Sr, 335
Reavy, R. J., Hutton, D. H. W. & Finch, A. A. The nodular granite of Castanheira, north central Portugal: origin of the nodules and evidence for diapiric mobilization of granite, 145
Reflection, seismic, 47, 563, 569, 665; (R) 391
Regional Geology of Africa (R), 284
Remote Sensing of Forest Resources. Theory and Application (R), 136
Remote Sensing of the Earth from Space: Atmospheric Correction (R), 861
Remote sensing, 177; (R) 136, 404, 860, 861
Reservoir Characterization II (R), 139
Reservoirs, marine clastic (R), 862; petroleum (R) 139
Rijkers, R., Duin, E., Dusar, M. & Langenaeker, V. Crustal structure of the London–Brabant Massif, southern North Sea, 569
Ripperdan, R. L., Magaritz, M. & Kirschvink, J. L. Carbon isotope and magnetic polarity evidence for non-depositional events within the Cambrian–Ordovician Boundary section near Dayangcha, Jilin Province, China, 443
Roberts, B., Hirons, S. R. & Fortey, N. J. Relationship between metamorphism and structure in the Skiddaw Group, English Lake District, 631
Roberts, B., Huff, W. D., Merriman, R. J. & Morgan, D. J. Distribution and tectonic setting of Ordovician K-bentonites in the United Kingdom, 93
Rodas, M., Luque, F. J. & Barrenechea, J. F. Graphite geothermometry in low and high temperature regimes: two case studies, 501
Rollinson, H. R. A terrane interpretation of the Archaean Limpopo Belt, 755
Roux, M., Decrouez, D., Barbin, V., Ramseyer, K., Debenay, J. P. & Schein, E. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Reply, 269
Royles, C. P., Verniers, J., Chacksfield, B. C., De Vos, W.,

D'Hooge, L., Dusar, M., Lee, M. K. & Poitevin, C. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Rügen, 725
Rushton, A. W. A. & Smith, N. J. P. Cambrian and Ordovician stratigraphy related to structure and seismic profiles in the western part of the English Midlands, 665
Ryoke Belt, 15

Saltmarshes. Morphodynamics, Conservation and Engineering Significance (R), 548
Scanning Electron Microscopy and X-Ray Microanalysis. A Text for Biologists, Materials Scientists, and Geologists, 2nd ed. (R), 402
Schein, E., Roux, M., Decrouez, D., Barbin, V., Ramseyer, K. & Debenay, J. P. Discussion of cathodoluminescence of Recent biogenic carbonates: an environmental and ontogenetic fingerprint: Reply, 269
Schmitz, B. Discussion on an iridium anomaly in the Ludlow Bone Bed from the Upper Silurian, England: Reply, 855
Scientists on Gaia (R), 858
Scotland, 245, 301, 353, 379
Sdzuy, K., Liñán, E. & Perejón, A. The Lower–Middle Cambrian stages and stratotypes from the Iberian Peninsula: a revision, 817
Sea-level change, 245; (R) 405, 548
Searl, A. & Rankin, S. A preliminary petrographic study of the Chilean nitrates, 319
Sedimentary Petrology, 2nd ed. (R), 136
Sedimentary Petrology. An Introduction to the Origin of Sedimentary Rocks, 2nd ed. (R), 398
Sedimentation, 417
Sedimentology, 681, 691, 725, 805; (R) 278, 732
Sediments, Quaternary (R), 126
SEM (R), 402
Sen, S. K., Acharyya, A. & Bhattacharya, S. Structural evidence supporting a remnant origin of patchy charnockites in the Chilka Lake area, India, 363
Servais, T., Vanguestaine, M. & Herbosch, A. Review of the stratigraphy of the Ordovician in the Brabant Massif, Belgium, 699
Sevastopulo, G. D., Clayton, G., Blackmore, R., Keeley, M. L. & Lewis, C. L. E. Apatite fission track data from southeast Ireland: implications for post-Variscan burial history, 171
Sha, J. & Fürsich, F. T. Biostratigraphy of the Upper Jurassic–Lower Cretaceous bivalves *Buchia* and *Aucellina* of eastern Heilongjiang, northeast China, 533
Sheales, black, 191
Shear zones, groundmass, 117
Shear-sense Indicators: A Review (R), 394
Siberia, 29; (R) 858
Sicily, 191
Silurian, 155, 681, 855
Simpson, M., Nicholas, C. J. & Henwood, A. A. A new discovery of early Cretaceous (Wealden) amber from the Isle of Wight, 847
Skiddaw Group, 621, 631
Smith, J. V., Miyake, Y. & Yamauchi, S. Flow direction and groundmass shear zones in dykes, Shimane Peninsula, Japan, 117
Smith, N. J. P. & Rushton, A. W. A. Cambrian and Ordovician stratigraphy related to structure and seismic profiles in the western part of the English Midlands, 665
Smith, R. D. A. & Ainsworth, R. B. Discussion on an iridium anomaly in the Ludlow Bone Bed from the Upper Silurian, England: Comment, 855
Soils, 113
Soper, N. J., Cooper, A. H., Millward, D. & Johnson, E. W. The early Palaeozoic evolution of northwest England, 711
Soper, N. J. Discussion on evidence for an unconformity at the base of the Eycott Volcanic Group: Comment, 271
Spain, 805, 817, 851
Spessartite, 657
Spitsbergen, 783
The Stability of Minerals (R), 731
Stable Isotope Geochemistry: A Tribute to Samuel Epstein (R), 408
Stable isotopes, 443; (R) 408
Start Complex, 345
Steele, S. A., Floyd, P. A. & Holdsworth, R. E. Geochemistry of the Start Complex greenschists: Rhenohercynian MORB?, 345
Stephens, M. B., Greiling, R. O. & Gayer, R. A. A basement culmination in the Scandinavian Caledonides formed by antiformal stacking (Bångonåive, northern Sweden), 471
Stone, P., Hughes, R. A. & Cooper, A. H. Structural evolution of the Skiddaw Group (English Lake District) on the northern margin of eastern Avalonia, 621
Strain, 145
Strath Ossian Pluton, 379
Stratigraphy, 101, 691, 699; (R) 857; bio-, 29; chrono-, 47
Straumsvola, 513
Stromatolites (R), 285
Structural geology, 353, 363; (R) 125, 394, 400, 401
Structural Geology. Principles, Concepts, and Problems (R), 400
Structure, 471, 621, 631, 691, 725; earth (R), 404
Suarez, M. & Bell, C. M. The depositional environments and tectonic development of a Mesozoic intra-arc basin, Atacama Region, Chile, 417
Sweden, 215, 471; (R) 276
Syenite, 453, 513

Taphonomy. Releasing the Data Locked in the Fossil Record (R), 138
Tectonic Evolution of the North Sea Rifts (R), 392
Tectonics, 233, 417, 691, 711, 783; (R) 392, 859; accretion, 177
Tegner, C. & Wilson, J. R. A late ultramafic suite in the Kap Edvard Holm layered gabbro complex, East Greenland, 431
TERRA-1: Understanding the Terrestrial Environment. The Role of Earth Observations from Space (R), 404
Terrane, 755
Tethys Ocean (R), 731
Texas, 57
Textures, igneous, 117
Theoretical Geochemistry: Application of Quantum Mechanics in the Earth and Mineral Sciences (R), 859
Thermodynamics (R), 126, 731
Thin section preparation (R), 404
Thorpe, R. S., Gaskarth, J. W. & Henney, P. J. Composite Ordovician lamprophyre (spessartite) intrusions around the Midlands Microcraton in central Britain, 657
Thorpe, R. S. Geochemistry and eruptive environment of metavolcanic rocks from the Mona Complex of Anglesey, North Wales, U.K., 85
Three-Dimensional Facies Architecture of Terrigenous Clastic

Sediments and Its Implications for Hydrocarbon Discovery and Recovery (R), 403
Thrust Tectonics (R), 859
Tipper, J. C. Do seismic reflections necessarily have chronostratigraphic significance?, 47
Tornquist Sea, 835
Tourneur, F., Vanguestaine, M., Buttler, C., Mamet, B., Mouravieff, N., Poty, E. & Préat, A. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Tracking Dinosaurs. A New Look at an Ancient World (R), 282
Transgression, 245
Triassic, 191
Trilobites (R), 275
Tucker, R. D., Pharaoh, T. C. & Noble, S. R. Lower Palaeozoic and Precambrian igneous rocks from eastern England, and their bearing on late Ordovician closure of the Tornquist Sea: constraints from U–Pb and Nd isotopes, 835
Tuff, 453
Turbeville, B. N. Sidewall differentiation in an alkalic magma chamber: evidence from syenite xenoliths in tuffs of the Latera caldera, Italy, 453

Uchman, A. & Crimes, T. P. A concentration of exceptionally well-preserved large tubular foraminifera in the Eocene Zumaya flysch, northern Spain, 851
UK, 85, 93, 101, 113, 203, 245, 257, 301, 345, 353, 369, 379, 543, 563, 569, 575, 593, 613, 621, 631, 647, 657, 665, 681, 691, 711, 767, 835, 847, 855; (R) 278, 281, 391, 392, 401, 402, 409, 558
Ultramafic rocks, 431
Understanding Catastrophe. Its Impact on Life on Earth (R), 857
Upper Cambrian Conodonts from Sweden (R), 276
Upwelling Systems: Evolution Since the Early Miocene (R), 551
USA, 57

Van den Haute, P. & Vercoutere, C. Post-Palaeozoic cooling and uplift of the Brabant Massif as revealed by apatite fission track analysis, 639
Vanguestaine, M., Buttler, C., Mamet, B., Mouravieff, N., Poty, E., Préat, A. & Tourneur, F. A preliminary study of Ashgill carbonate beds from the lower part of the Fosses Formation (Condroz, Belgium), 673
Vanguestaine, M., De Vos, W., Verniers, J. & Herbosch, A. A new geological map of the Brabant Massif, Belgium, 605
Vanguestaine, M., Herbosch, A. & Servais, T. Review of the stratigraphy of the Ordovician in the Brabant Massif, Belgium, 699
Vendian, 29
Vercoutere, C. & van den Haute, P. Post-Palaeozoic cooling and uplift of the Brabant Massif as revealed by apatite fission track analysis, 639
Verniers, J., Chacksfield, B. C., De Vos, W., D'Hooge, L., Dusar, M., Lee, M. K., Poitevin, C. & Royles, C. P. A new look at Belgian aeromagnetic and gravity data through image-based display and integrated modelling techniques, 583
Verniers, J., Herbosch, A., Vanguestaine, M. & De Vos, W. A new geological map of the Brabant Massif, Belgium, 605
Verniers, J., Pharaoh, T. C., Molyneux, S. G., Merriman, R. J. & Lee, M. K. The Caledonides of the Anglo-Brabant Massif reviewed, 561
Vertebrates, 767; (R) 282, 395, 857
Volcanic rocks, 85, 93, 101, 271, 369, 621; (R) 137, 276
Volcanoes (R), 133, 276
Volcanologie (R), 276
Von Winterfeld, C., Katzung, G., Giese, U. & Walter, R. The Rügen Caledonides, northeast Germany, 725

Wales, 101, 113; (R) 137, 281
Walter, R., Von Winterfeld, C., Katzung, G. & Giese, U. The Rügen Caledonides, northeast Germany, 725
Watkins, R. T., Milner, S. C. & Le Roex, A. P. Rb–Sr age determinations of rocks from the Okenyenya igneous complex, northwestern Namibia, 335
Wealden Series, 767, 847
Webb, P. C., Pharaoh, T. C. & Brewer, T. S. Subduction-related magmatism of late Ordovician age in eastern England, 647
Wendt, J. Steep-sided carbonate mud mounds in the Middle Devonian of the eastern Anti-Atlas, Morocco, 69
The West African Orogens and Circum-Atlantic Correlatives (R), 121
West, R. G. & Boreham, S. Late Quaternary sediments with *Chara* encrustations in southern Fenland, 543
Westmorland Monocline, 203
Williamson, J. P., Green, C. A., De Vos, W., Lee, M. K. & Pharaoh, T. C. Evidence on the deep structure of the Anglo-Brabant Massif from gravity and magnetic data, 575
Wilson, J. R. & Tegner, C. A late ultramafic suite in the Kap Edvard Holm layered gabbro complex, East Greenland, 431
Woodcock, N. H., Daly, P., Merriman, R. J. & Pharaoh, T. C. The metamorphic history of the concealed Caledonides of eastern England and their foreland, 613; erratum, 865
Woodcock, N. H. & Pharaoh, T. C. Silurian facies beneath East Anglia, 681
Wrekin Quartzite, 257
Wright, A. E., Fairchild, I. J., Moseley, F. & Downie, C. The Lower Cambrian Wrekin Quartzite and the age of its unconformity on the Ercall Granophyre, 257

X-ray analysis (R), 140, 402

Yamauchi, S., Smith, J. V. & Miyake, Y. Flow direction and groundmass shear zones in dykes, Shimane Peninsula, Japan, 117